RULES AND REGULATIONS FOR WATER QUALITY CONTROL

CHAPTER 391-3-6

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GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
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RULES
OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

CHAPTER 391-3-6
WATER QUALITY CONTROL

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391-3-6-.01 Organization and Administration

(1) **Purpose.** The purpose of Rule 391-3-6-.01 is to establish the organizational and administrative procedures to be followed in the administration and enforcement of the Georgia Water Quality Control Act, as amended, and to carry out the purposes and requirements of said Act and of the Federal Water Pollution Control Act Amendments of 1972, as amended.

(2) **Definitions.** All terms used in this Paragraph shall be interpreted in accordance with the definitions as set forth in the Georgia Water Quality Control Act, as amended, unless otherwise defined in this Paragraph or in any other Paragraph of these rules:

(a) "Act" means the Georgia Water Quality Control Act, as amended;

(b) "Board" means the Board of Natural Resources of the State of Georgia;

(c) "Department" means the Department of Natural Resources of the State of Georgia;

(d) "Director" means the Director of the Division of Environmental Protection of the Department of Natural Resources, State of Georgia;

(e) "Division" means the Division of Environmental Protection of the Department of Natural Resources, State of Georgia;

(f) "E.P.A." means the United States Environmental Protection Agency;

(g) "Federal Act" means the Federal Water Pollution Control Act Amendments of 1972, as amended;

(h) "National Pollutant Discharge Elimination System" (NPDES) means the national system for the issuance of permits under Section 402 of the Federal Water Pollution Control Act Amendments of 1972;

(i) "Regional Administrator" means the Regional Administrator for the EPA region which includes the State of Georgia.

(3) **Organization.** The Division of Environmental Protection of the Department of Natural Resources is responsible for enforcing those environmental protection laws of the State of Georgia as specified in the Executive Reorganization Act of 1972, as amended. Requests for information and submission of materials should be made to the Division office.

(4) **Administrative Hearings.**

(a) Hearings may be held in accordance with the Act in connection with the following matters:

1. To determine whether or not an alleged pollution is contrary to the public interest;

2. In connection with the securing, within the time specified by order or permit of the Director, of such operating results as are reasonable and practicable of attainment toward the control, abatement or prevention of pollution of the waters of the State and preservation of the necessary quality for the reasonable use thereof;

3. In connection with notice to the holder of a permit of intent to revoke, suspend, or modify the permit;

4. In connection with the refusal of any person to cooperate with the efforts of the Division to reduce pollution, and upon the issuance of an order by the Director, to bring about the reduction or elimination of pollution within a reasonable time;

5. Any person who is aggrieved or adversely affected by any order or action of the Director and who petitions the Director for a hearing within thirty (30) days of the issuance of such order or notice of such action. Such person shall be granted a hearing before a hearing officer appointed by the Board of Natural Resources. The initial hearing any administrative review thereof shall be conducted in accordance with Section 17(a) of the Executive Reorganization Act of 1972, as amended.

6. Any person against whom an emergency order is directed, provided such person petitions the Director for a hearing within the thirty (30) days of the issuance of such order. Such person shall be afforded a hearing as soon as possible.

7. In connection with public hearings required pursuant to Section 402(b)(3) of the Federal Act and Federal Regulations, 40 C.F.R. 124.36.

8. In connection with public hearings or public participation required pursuant to Section 101(e) of the Federal Act.

(b) Insofar as applicable to the administrative procedures required pursuant to the Georgia Water Quality Control Act, as amended, Sections 14, 15, 16, 17, and 18 of the Georgia Administrative Procedure Act, as amended, and Section 17(a) of the Executive Reorganization Act of 1972, as amended, shall apply.

(5) Public Participation

(a) Notice of all hearings provided for above shall be issued in accordance with Section 14 of the Georgia Administrative Procedures Act, as amended, and Federal Regulations, 40 C.F.R. 124.37.

(b) Interested persons shall have the right to participate in the enforcement of the Georgia Water Quality Control Act and rules promulgated thereunder pursuant to the applicable provisions of the Georgia Water Quality Control Act,§ O.C.G.A. 12-5-20, et seq.; § O.C.G.A. 50-13-1, et seq.; the Georgia Civil Practices Act, § O.C.G.A. 9-11-1, et seq.; or any other applicable provision of Georgia law.

(6) Notice to File Plan of Correction or Improvement.

(a) In order to carry out a comprehensive plan to prevent and control pollution, the Division, as required by Section 5 of the Act and Section 303 of the Federal Act, may conduct studies and perform evaluations to determine waste load allocations in order to specify the degree of treatment and/or technology necessary to achieve the established effluent limitations; the maintenance of existing wastewater treatment technology, supplementary treatment or other specific measures necessary to attain and maintain applicable water quality standards, and protect the downstream users; or such other measures necessary to prevent further pollution or reduce existing pollution. Upon the establishment of the necessary corrective action, the discharger will be required to file a plan and schedule of improvement with the Division.

The Director may issue a notice to any person to submit within a specified time a plan of improvement and schedule for compliance with the specified requirements.

(b) The Director is authorized to approve plans, specifications, and related material, and to issue permits on behalf of the Division to persons who apply for such permits in accordance with Section 10 of the Act and such rules as are adopted and promulgated pursuant to same.

(7) Director of the Environmental Protection Division; Conflicts of Interest. The Director of the Environmental Protection Division shall fully meet and qualify as to the conflict of interest requirements provided for in the Federal Water Pollution Control Act , as amended, 33 U.S.C.§ 1314(i). (D), and the rules and regulations thereunder, particularly Federal Regulations, 40 C.F.R. 123.25 (c).

(8) Effective Date. This Rule shall become effective twenty days after filing with the Secretary of State's office.

Authority Ga. Laws 1964, p. 416, as amended: Ga. Laws 1972, p. 1015, as amended. Administrative History. Original Rule as filed on June 10, 1974.; effective June 30, 1974. Amended: E.R. 391-3-6 was filed May. 1,1996, eff. April 25, 1996, the date of adoption to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER, as specified by the Agency. Amended: F. July 10, 1996. Eff. July 30, 1996. Amended: Authority: O.C.G.A. § 12-5-23 (a). Authority: O.C.G.A. §§ 12-2-2 (a), 12-2-24. Amended: F. May 21, 1998; Effective June 18, 1998.

391-3-6-.02 Preparation and Submission of Engineering Reports, Plans Specifications, and Environmental Information Documents.

(1) Purpose. The purpose of Paragraph 391-3-6-.02 is to establish procedures to:

(a) Be followed by persons submitting to the Division engineering reports, plans and specifications, and related materials for the construction of any system for the disposal or treatment of pollutants;

(b) Provide for environmental assessment and public participation for all proposed publicly owned wastewater treatment facility construction, including construction, upgrading, or expansion of new or existing facilities.

(2) Definitions. All terms used in this Paragraph shall be interpreted in accordance with the definitions as set forth in the Act, unless otherwise defined in this Paragraph or in any other Paragraph of these Rules:

(a) "Professional Engineer." As used in this chapter, the term means the same as the definition contained in O.C.G.A. Section 43-15-2(10).

(b) "Owner." Any person owning or operating any system for the disposal or treatment of pollutants.

(c) "Sewerage System" means any system for the treatment or disposal of pollutants, including treatment works, pipe lines or conduits, pumping stations and force mains, and all other constructions, devices, and appliances appurtenant thereto, used for conducting pollutants to the point of ultimate disposal.

(d) "Wastewater Treatment Facilities" means any device or system (including recycling and reclamation) used in the treatment of sewage or other waterborne waste or pollutants.

(e) "Environmental Information Document" means an assessment of environmental impact of any proposed construction, upgrading or expansion of a wastewater treatment facility. This evaluation may include, but is not limited to, the impact of the proposed construction, upgrading or expansion on air quality, flood plains, wetlands, noise pollution, water quality, cultural resources, and endangered or threatened species.

(f) "Public Participation" means providing information to the public potentially affected by the proposed project and providing for public input prior to construction.

(3) **General Provisions.**

(a) Any person who desires to erect, modify, or alter a sewerage system shall obtain approval of any plans, specifications and related materials for such system from the Division prior to commencement of construction. The review of certain types of sewer system extensions may be delegated to local governments that have demonstrated the capability for such reviews. This delegation shall be by written agreement.

(b) Engineering material submitted to the Division shall be prepared by or under the direct supervision or review and bear the seal of a Professional Engineer competent in the design of sewerage systems and wastewater treatment facilities. At no time shall this requirement be in conflict with O.C.G.A. Section 43-15 governing the practice of professional engineering and surveying.

(c) During the early stages of planning for the construction of a sewerage system, and prior to the formal submission of an application and accompanying materials for any permit required pursuant to the Act, or materials submitted for Division approval pursuant to these rules, a conference between the project owner or his representative and representatives of the Division shall be held at the request of either the Director or the project owner, in order to reach a clear understanding of the proposal to be formally submitted to the Division at a later time. Such conference shall be granted within sixty (60) days after a written request to the Division by the project owner or his representative. If a conference is not granted within such period, then such permit application or other materials shall be filed and acted upon by the Division after the expiration of such period.

(d) Sufficient copies of completed reports, plans and specifications, and related materials shall be submitted to the Division to cover necessary distribution when approved. Such material, accompanied by a letter of transmittal, shall be submitted by the project owner or his representative well in advance of any critical date involved, in order that time will be available for review, discussion, and revision when necessary. The submittal of such material shall be complete, accurate, distinct, legible, and relevant in respect to the project to which it applies. Permit applications shall be processed as provided in Paragraph 391-3-6-.06.

(e) Plans for a sewerage system submitted to the Division will be considered for approval by the Division only when designed so as to minimize the passage of rainwater from roofs, streets or other areas and all groundwater, other than unavoidable infiltration, through such sewerage system.

(f) All proposed lift stations must be approved by the Division.

(g) All projects for the construction, upgrading or expansion of publicly owned wastewater treatment facilities within the State shall be required to prepare an Environmental Information Document (EID). The Division will perform a review of the EID in accordance with procedures developed by the Director.

1. The party or parties responsible for the project will consult with Federal and State agencies as appropriate for information required in preparing the EID.

2. For municipal facilities, the party or parties responsible for the project will conduct at least one public meeting during the planning process. The public will be allowed to submit written comments at any point during the facilities planning process.

(4) **Engineering Reports.** Engineering reports submitted to the Division shall contain a comprehensive description of the proposed project and shall include the following:

(a) Pertinent information regarding the existing sewerage system, if applicable;

(b) Characteristics of existing pollutants and existing or proposed treatment of such pollutants;

(c) Demonstration of the need for the proposed sewerage system;

(d) Evaluation of alternatives to define the most cost effective method for meeting established effluent limitations, water quality goals, and treatment requirements;

(e) Results to be expected from treatment process;

(f) Sufficient maps, charts, tables, calculations, basis of design data and graphs to make the report readily understandable;

(g) An operation and maintenance program description;

(h) Such other pertinent engineering information as the Division may require.

(5) **Plans and Specifications.** Plans and specifications submitted to the Division for a sewerage system shall include the following:

(a) A map showing the area to be served by the sewerage system;

(b) Profiles of proposed sewers;

(c) Construction details of manholes and other special sewer structures;

(d) General and detailed plans for the treatment facility;

(e) Specifications for the construction of the sewerage system;

(f) Such other plans and specifications as the Division may require.

(6) **General Map Plans.** General map plans submitted to the Division for a sewerage system shall include the following:

(a) A map plan that shows the entire area to be served, drawn to a scale of from 100 to 300 feet per inch. The map plan may be divided into sections, provided the sheets are bound together and indexed to show the area covered by each sheet.

(b) All existing and proposed streets in the area to be served; surface elevations at all street intersections; the location of all existing sewers, separate or combined; the location of the treatment facility; the location of the existing and proposed sewer outlets or overflows; the elevation of the highest known stream water level at the outlets and the treatment facility; and clear identification of any areas from which sewage is to be pumped.

(c) Clear designation on the plan by suitable symbols of all sewer appurtenances, including, but not limited to, manholes, siphons and pumps.

(d) Such other information as the Division may require.

(7) **Sewer Plans and Profiles.** Sewer plans and profiles submitted to the Division for a sewerage system shall include the following:

(a) Sewers and force mains, drawn at a scale that shows the profile for all manholes, siphons, railroad crossings, street or stream crossings, elevations of stream beds, normal stream water levels, and sizes and grades of sewers which show surface elevations and sewer invert elevations.

(b) Detailed drawings of all sewer appurtenances, including, but not limited to, manholes, inspection chambers, siphons, lift stations, and any special structures to accompany the sewer plans. Detailed drawings shall be to a scale suitable to clearly show the design details.

(8) **Treatment Facilities Plans.** Plans for treatment facilities submitted to the Division shall include the following:

(a) A general plan that clearly identifies the exact location of the facilities, areas reserved for future expansion, access roads to the various units, and the point at which the access roads connect with existing road or street systems. It shall also show sufficient detail of the units, pipelines or any other features so as to make the proposed treatment process clearly and easily understood. The elevation of all units and water surfaces shall be shown.

(b) Detailed plans which show longitudinal and transverse sections sufficient to explain the construction of each treatment unit.

(c) Flow measuring devices at appropriate points in the plan. Sampling and recording devices may be required by the Division when deemed necessary.

(d) Such other information as the Division may require.

(9) **Approval of Plans and Specifications.** Approval of the plans and specifications by the Division does not include or imply approval of the structural, electrical, or mechanical integrity of the sewerage system, treatment facilities, units or equipment.

(10) **Deviation from Approval Plans and Specifications.** No deviations from approved plans and specifications shall be made during construction unless documentation showing proposed changes has been submitted to and approved by the Division.

(11) **Effective Date.** This Rule shall become effective twenty days after filing with the Secretary of State's Office.

Authority Ga. Laws 1964, p. 416, as amended; O.C.G.A. Sec. 12-5-20, et seq. Administrative History. Original Rule entitled "Preparation and Submission of Engineering Reports and Plans and Specifications" was filed on June 10, 1974; effective on June 30, 1974. Amended: Filed May 29, 1985, effective June 19, 1985. Amended: Retitled "Preparation and Submission of Engineering Reports, Plans and Specifications, and Environmental Information Documents" F. Apr. 3, 1990, eff.. Apr. 23, 1990. Amended F. Apr. 8, 1993, eff. Apr 28, 1993. Amended: E.R. 391-3-6 was filed May. 1,1996, eff. April 25, 1996, the date of adoption to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER, as specified by the Agency. Amended: F. July 10, 1996. Eff. July 30, 1996.

391-3-6-.03 Water Use Classifications and Water Quality Standards.* Amended.

(1) **Purpose.** The establishment of water quality standards.

(2) **Water Quality Enhancement:**

(a) The purposes and intent of the State in establishing Water Quality Standards are to provide enhancement of water quality and prevention of pollution; to protect the public health or welfare in accordance with the public interest for drinking water supplies, conservation of fish, wildlife and other beneficial aquatic life, and agricultural, industrial, recreational, and other reasonable and necessary uses and to maintain and improve the biological integrity of the waters of the State.

(b) Those waters in the State whose existing quality is better than the minimum levels established in standards on the date standards become effective will be maintained at high quality; with the State having the power to authorize new developments, when it has been affirmatively demonstrated to the State that a change is justifiable to provide necessary social or economic development; and provided further that the level of treatment required is the highest and best practicable under existing technology to protect existing beneficial water uses. Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. All requirements in the Federal Regulations, 40 C.F.R. 131.12, will be achieved before lowering of water quality is allowed for high quality water.

(c) Outstanding National Resource Waters (ONRW). This designation will be considered for an outstanding national resource waters, such as waters of National or State parks and wildlife refuges and waters of exceptional recreational or ecological significance. For waters designated as ONRW, existing water quality shall be maintained and protected.

(i) No new point source discharges or increases in the discharge of pollutants above permitted level from existing point source discharges to ONRW shall be allowed.

(ii) Existing point source discharges to ONRW shall be allowed, provided they are treated or controlled in accordance with applicable laws and regulations.

(iii) New point source discharges or expansions of existing point source discharges to waters upstream of, or tributary to, ONRW shall be regulated in accordance with applicable laws and regulations, including compliance with water quality criteria for the use classification applicable to the particular water. However, no new point source discharge or expansion of an existing point source discharge to waters upstream of, or tributary to, ONRW shall be allowed if such discharge would not maintain and protect water quality within the ONRW.

(d) In applying these policies and requirements, the State of Georgia will recognize and protect the interest of the Federal Government in interstate and intrastate (including coastal and estuarine) waters. Toward this end the State will consult and cooperate with the Environmental Protection Agency on all matters affecting the Federal interest.

*Applicable to Intrastate and Interstate Waters of Georgia.

(3) **Definitions.** All terms used in this paragraph shall be interpreted in accordance with definitions as set forth in the Act and as otherwise herein defined:

(a) "Acute criteria" corresponds to EPA's definition for Criteria Maximum Concentration which is defined in 40 CFR 131.36 as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) without deleterious effects.

(b) "Biological integrity" is functionally defined as the condition of the aquatic community inhabiting least impaired waterbodies of a specified habitat measured by community structure and function.

(c) "Chronic criteria" corresponds to EPA's definition for Criteria Continuous Concentration which is defined in 40 CFR 131.36 as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

(d) "Coastal waters" are those littoral recreational waters on the ocean side of the Georgia coast.

(e) "Existing instream water uses" include water uses actually attained in the waterbody on or after November 28, 1975.

(f) "Intake temperature" is the natural or background temperature of a particular waterbody unaffected by any man-made discharge or thermal input.

(g) "Reasonable and necessary uses" means drinking water supplies, conservation, protection, and propagation of fish, shellfish, wildlife and other beneficial aquatic life, agricultural, industrial, recreational, and other legitimate uses.

(h) "Secondary contact recreation" is incidental contact with the water, wading, and occasional swimming.

(i) "Shellfish" refers to clams, oysters, scallops, mussels, and other bivalve mollusks.

(j) "Water" or "waters of the State" means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

(4) **Water Use Classifications.** Water use classifications for which the criteria of this Paragraph are applicable are as follows:

(a) Drinking Water Supplies
(b) Recreation
(c) Fishing, Propagation of Fish, Shellfish, Game and Other Aquatic Life
(d) Wild River
(e) Scenic River
(f) Coastal Fishing

(5) **General Criteria for All Waters.** The following criteria are deemed to be necessary and applicable to all waters of the State:

(a) All waters shall be free from materials associated with municipal or domestic sewage, industrial waste or any other waste which will settle to form sludge deposits that become putrescent, unsightly or otherwise objectionable.

(b) All waters shall be free from oil, scum and floating debris associated with municipal or domestic sewage, industrial waste or other discharges in amounts sufficient to be unsightly or to interfere with legitimate water uses.

(c) All waters shall be free from material related to municipal, industrial or other discharges which produce turbidity, color, odor or other objectionable conditions which interfere with legitimate water uses.

(d) Turbidity. The following standard is in addition to the narrative turbidity standard in Paragraph 391-3-6-.03(5)(c) above:

All waters shall be free from turbidity which results in a substantial visual contrast in a water body due to a man-made activity. The upstream appearance of a body of water shall be as observed at a point immediately upstream of a turbidity-causing man-made activity. That upstream appearance shall be compared to a point which is located sufficiently downstream from the activity so as to provide an appropriate mixing zone. For land disturbing activities, proper design, installation, and maintenance of best management practices and compliance with issued permits shall constitute compliance with Paragraph 391-3-6-.03(5)(d).

(e) All waters shall be free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries or other sources, such as nonpoint sources, in amounts, concentrations or combinations which are harmful to humans, animals or aquatic life.

(i) Instream concentrations of the following chemical constituents which are considered to be other toxic pollutants of concern in the State of Georgia shall not exceed the criteria indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones:

1. 2,4-Dichlorophenoxyacetic acid (2,4-D)	70 µg/l
2. Methoxychlor	0.03 µg/l*
3. 2,4,5-Trichlorophenoxy propionic acid (TP Silvex)	50 µg/l

(ii) Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed the acute criteria indicated below under 1-day, 10-year minimum flow (1Q10) or higher stream flow conditions and shall not exceed the chronic criteria indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones or in accordance with site specific effluent limitations developed in accordance with procedures presented in 391-3-6-.06. Unless otherwise specified, the criteria below are listed in their total recoverable form. Because most of the numeric criteria for the metals below are listed as the dissolved form, total recoverable concentrations of metals that are measured instream will need to be

translated to the dissolved form in order to compare the instream data with the numeric criteria. This translation will be performed using guidance found in "Guidance Document of Dynamic Modeling and Translators August 1993" found in Appendix J of EPA's Water Quality Standards Handbook: Second Edition, EPA-823-B-94-005a or by using other appropriate guidance from EPA.

		Acute	Chronic
1.	Arsenic		
	(a) Freshwater	50 µg/l [1]	50 µg/l [1]
	(b) Coastal and Marine Estuarine Waters	69 µg/l [1]	36 µg/l [1]
2.	Cadmium		
	(a) Freshwater	1.7 µg/l [1,2,3]	0.62 µg/l [1,2,3]
	(b) Coastal and Marine Estuarine Waters	43 µg/l [1]	9.2 µg/l [1,2]
3.	Chromium III		
	(a) Freshwater	310 µg/l [1,3]	100 µg/l [1,3]
	(b) Coastal and Marine Estuarine Waters	–	–
4.	Chromium VI		
	(a) Freshwater	16 µg/l [1]	11 µg/l [1]
	(b) Coastal and Marine Estuarine Waters	1,100 µg/l [1]	50 µg/l [1]
5.	Copper		
	(a) Freshwater	8.8 µg/l [1,2,3]	6.2 µg/l [1,2,3]
	(b) Coastal and Marine Estuarine Waters	2.4 µg/l [1,2]	2.4 µg/l [1,2]
6.	Lead		
	(a) Freshwater	30 µg/l [1,3]	1.2 µg/l [1,2,3]
	(b) Coastal and Marine Estuarine Waters	130 µg/l [1]	5.3 µg/l [1,2]
7.	Mercury		
	(a) Freshwater	-	0.012 µg/l [2]
	(b) Coastal and Marine Estuarine Waters	-	0.025 µg/l [2]
8.	Nickel		
	(a) Freshwater	790 µg/l [1,3]	88 µg/l [1,3]
	(b) Coastal and Marine Estuarine Waters	74 µg/l [1]	8.2 µg/l [1,2]
9.	Selenium		
	(a) Freshwater	–	5.0 µg/l [2]
	(b) Coastal and Marine Estuarine Waters	–	71 µg/l [1]
10.	Silver	– [4]	– [4]
11.	Zinc		
	(a) Freshwater	64 µg/l [1,3]	58 µg/l [1,3]
	(b) Coastal and Marine Estuarine Waters	90 µg/l [1]	81 µg/l [1]

[1] The in-stream criterion is expressed in terms of the dissolved fraction in the water column . Conversion factors used to calculate dissolved criteria are found in 40 CFR 131.36 and the Federal Register, Volume 60, No. 86, Thursday, May 4, 1995.
[2] The in-stream criterion is lower than the EPD laboratory detection limits
[3] The aquatic life criteria for these metals are expressed as a function of total hardness (mg/l) in a water body. Values in the table above assume a hardness of 50 mg/l $CaCO_3$. For other hardness values, the following equations from 40 CFR 131.36 should be used. The minimum hardness allowed for use in these equations shall not be less than 25 mg/l, as calcium carbonate and the maximum shall not be greater than 400 mg/l as calcium carbonate.

Cadmium
acute criteria = $(e^{(1.128[\ln(\text{hardness})] - 3.828)})(1.136672-[(\ln \text{hardness})(0.041838)]$ µg/l
chronic criteria = $(e^{(0.7852[\ln(\text{hardness})] - 3.490)})(1.101672-[(\ln \text{hardness})(0.041838)]$µg/l

Chromium III
acute criteria = $(e^{(0.8190[\ln(\text{hardness})] + 3.688)})(0.316)$ µg/l
chronic criteria = $(e^{(0.8190[\ln(\text{hardness})] + 1.561)})(0.860)$ µg/l

Copper
acute criteria = $(e^{(0.9422[\ln(\text{hardness})] - 1.464)})(0.96)$ µg/l
chronic criteria = $(e^{(0.8545[\ln(\text{hardness})] - 1.465)})(0.96)$ µg/l

Lead
acute criteria = $(e^{(1.273[\ln(\text{hardness})] - 1.460)})(1.46203 - [(\ln \text{hardness})(0.145712)])$ µg/l
chronic criteria = $(e^{(1.273[\ln(\text{hardness})] - 4.705)})(1.46203 - [(\ln \text{hardness})(0.145712)])$ µg/l

Nickel
acute criteria = $(e^{(0.8460[\ln(\text{hardness})] + 3.3612)})(.998)$ µg/l
chronic criteria = $(e^{(0.8460[\ln(\text{hardness})] + 1.1645)})(.997)$ µg/l

Zinc
acute criteria = $(e^{(0.8473[\ln(\text{hardness})] + 0.8604)})(0.978)$ µg/l
chronic criteria = $(e^{(0.8473[\ln(\text{hardness})] + 0.7614)})(0.986)$ µg/l

[4] This pollutant is addressed in 391-3-6-.06.

(iii) Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed criteria indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones or in accordance with site specific effluent limitations developed in accordance with procedures presented in 391-3-6-.06.

1.	Chlordane	
	(a) Freshwater	0.0043 µg/l*
	(b) Coastal and Marine Estuarine Waters	0.004 µg/l*
2.	Cyanide	
	(a) Freshwater	5.2 µg/l*
	(b) Coastal and Marine Estuarine Waters	1.0 µg/l*
3.	Dieldrin	0.0019 µg/l*
4.	4,4'-DDT	0.001 µg/l*
5.	a-Endosulfan	
	(a) Freshwater	0.056 µg/l*
	(b) Coastal and Marine Estuarine Waters	0.0087 µg/l*
6.	b-Endosulfan	
	(a) Freshwater	0.056 µg/l*
	(b) Coastal and Marine Estuarine Waters	0.0087 µg/l*
7.	Endrin	0.002 µg/l*
8.	Heptachlor	
	(a) Freshwater	0.0038 µg/l*
	(b) Coastal and Marine Estuarine Waters	0.0036 µg/l*
9.	Heptachlor Epoxide	
	(a) Freshwater	0.0038 µg/l*
	(b) Coastal and Marine Estuarine Waters	0.0036 µg/l*
10.	Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	0.08 µg/l
11.	Pentachlorophenol	
	(a) Freshwater	2.1 µg/l*
	(b) Coastal and Marine Estuarine Waters	7.9 µg/l*
12.	PCB-1016	0.014 µg/l
13.	PCB-1221	0.014 µg/l
14.	PCB-1232	0.014 µg/l
15.	PCB-1242	0.014 µg/l
16.	PCB-1248	0.014 µg/l
17.	PCB-1254	0.014 µg/l
18.	PCB-1260	0.014 µg/l
19.	Phenol	300 µg/l
20.	Toxaphene	0.0002 µg/l*

*The in-stream criterion is lower than the EPD laboratory detection limits.

(iv) Instream concentrations of the following chemical constituents listed by the U. S. Environmental Protection Agency as toxic priority pollutants pursuant to Section 307(a)(1) of the Federal Clean Water Act (as amended) shall not exceed criteria indicated below under annual average or higher stream flow conditions:

1.	Acenaphthene	**
2.	Acenaphthylene	**
3.	Acrolein	780 µg/l
4.	Acrylonitrile	0.665 µg/l
5.	Aldrin	0.000136 µg/l
6.	Anthracene	110000 µg/l
7.	Antimony	4308 µg/l
8.	Arsenic	50 µg/l
9.	Benzidine	0.000535 µg/l
10.	Benzo(a)Anthracene	0.0311 µg/l
11.	Benzo(a)Pyrene	0.0311 µg/l
12.	3,4-Benzofluoranthene	0.0311 µg/l
13.	Benzene	71.28 µg/l
14.	Benzo(ghi)Perylene	**
15.	Benzo(k)Fluoranthene	0.0311 µg/l
16.	Beryllium	**
17.	a-BHC-Alpha	0.0131 µg/l
18.	b-BHC-Beta	0.046 µg/l
19.	Bis(2-Chloroethyl)Ether	1.42 µg/l
20.	Bis(2-Chloroisopropyl)Ether	170000 µg/l
21.	Bis(2-Ethylhexyl)Phthalate	5.92 µg/l
22.	Bromoform (Tribromomethane)	360 µg/l
23.	Carbon Tetrachloride	4.42 µg/l
24.	Chlorobenzene	21000 µg/l
25.	Chlorodibromomethane	34 µg/l
26.	2-Chloroethylvinyl Ether	**

27.	Chlordane	0.000588 µg/l
28.	Chloroform (Trichloromethane)	470.8 µg/l
29.	2-Chlorophenol	**
30.	Chrysene	0.0311 µg/l
31.	Dibenzo(a,h)Anthracene	0.0311µg/l
32.	Dichlorobromomethane	22 µg/l
33.	1,2-Dichloroethane	98.6 µg/l
34.	1,1-Dichloroethylene	3.2 µg/l
35.	1,3-Dichloropropylene (Cis)	1700 µg/l
36.	1,3-Dichloropropylene (Trans)	1700 µg/l
37.	2,4-Dichlorophenol	790 µg/l
38.	1,2-Dichlorobenzene	17000 µg/l
39.	1,3-Dichlorobenzene	2600 µg/l
40.	1,4-Dichlorobenzene	2600 µg/l
41.	3,3'Dichlorobenzidine	0.077 µg/l
42.	4,4'-DDT	0.00059 µg/l
43.	4,4'-DDD	0.00084 µg/l
44.	4,4'-DDE	0.00059 µg/l
45.	Dieldrin	0.000144 µg/l
46.	Diethyl Phthalate	120000 µg/l
47.	Dimethyl Phthalate	2900000 µg/l
48.	2,4-Dimethylphenol	**
49.	2,4-Dinitrophenol	14264 µg/l
50.	Di-n-Butyl Phthalate	12100 µg/l
51.	2,4-Dinitrotoluene	9.1 µg/l
52.	1,2-Diphenylhydrazine	0.54 µg/l
53.	Endrin Aldehyde	0.81 µg/l
54.	Endosulfan Sulfate	2.0 µg/l
55.	Ethylbenzene	28718 µg/l
56.	Fluoranthene	370 µg/l
57.	Fluorene	14000 µg/l
58.	Heptachlor	0.000214 µg/l
59.	Heptachlor Epoxide	0.00011 µg/l
60.	Hexachlorobenzene	0.00077 µg/l
61.	Hexachlorobutadiene	49.7 µg/l
62.	Hexachlorocyclopentadiene	17000 µg/l
63.	Hexachloroethane	8.85 µg/l
64.	Indeno(1,2,3-cd)Pyrene	.0311 µg/l
65.	Isophorone	600 µg/l
66.	Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	0.0625 µg/l
67.	Methyl Bromide (Bromomethane)	4000 µg/l
68.	Methyl Chloride (Chloromethane)	**
69.	Methylene Chloride	1600 µg/l
70.	2-Methyl-4,6-Dinitrophenol	765 µg/l
71.	3-Methyl-4-Chlorophenol	**
72.	Nitrobenzene	1900 µg/l
73.	N-Nitrosodimethylamine	8.12 µg/l
74.	N-Nitrosodi-n-Propylamine	**
75.	N-Nitrosodiphenylamine	16.2 µg/l
76.	PCB-1016	0.00045 µg/l
77.	PCB-1221	0.00045 µg/l
78.	PCB-1232	0.00045 µg/l
79.	PCB-1242	0.00045 µg/l
80.	PCB-1248	0.00045 µg/l
81.	PCB-1254	0.00045 µg/l
82.	PCB-1260	0.00045 µg/l
83.	Phenanthrene	**
84.	Phenol	4,600,000 µg/l
85.	Pyrene	11,000 µg/l
86.	1,1,2,2-Tetrachloroethane	10.8 µg/l
87.	Tetrachloroethylene	8.85 µg/l
88.	Thallium	6.3 µg/l
89.	Toluene	200000 µg/l
90.	1,2-Trans-Dichloroethylene	**

91.	1,1,2-Trichloroethane	41.99	µg/l
92.	Trichloroethylene	80.7	µg/l
93.	2,4,6-Trichlorophenol	6.5	µg/l
94.	1,2,4-Trichlorobenzene	**	
95.	Vinyl Chloride	525	µg/l

** These pollutants are addressed in 391-3-6-.06.

(v) Site specific criteria for the following chemical constituents will be developed on an as-needed basis through toxic pollutant monitoring efforts at new or existing discharges that are suspected to be a source of the pollutant at levels sufficient to interfere with designated uses:

1. Asbestos

(vi) Instream concentrations of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) must not exceed 0.0000012 µg/l under long-term average stream flow conditions.

(f) Applicable State and Federal requirements and regulations for the discharge of radioactive substances shall be met at all times.

(g) The dissolved oxygen criteria as specified in individual water use classifications shall be applicable at a depth of one meter below the water surface; in those instances where depth is less than two meters, the dissolved oxygen criterion shall be applied at a mid-depth. On a case specific basis, alternative depths may be specified.

(6) **Specific Criteria for Classified Water Usage.** In addition to the general criteria, the following criteria are deemed necessary and shall be required for the specific water usage as shown:

(a) Drinking Water Supplies: Those waters approved as a source for public drinking water systems permitted or to be permitted by the Environmental Protection Division. Waters classified for drinking water supplies will also support the fishing use and any other use requiring water of a lower quality.

(I) Bacteria: For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 ml (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 ml for any sample. The State does not encourage swimming in surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of fecal coliform.

(ii) Dissolved oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for water supporting warm water species of fish.

(iii) pH: Within the range of 6.0 - 8.5.

(iv) No material or substance in such concentration that, after treatment by the public water treatment system, exceeds the maximum contaminant level established for that substance by the Environmental Protection Division pursuant to the Georgia Rules for Safe Drinking Water.

(v) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F of natural stream temperatures.

(b) Recreation: General recreational activities such as water skiing, boating, and swimming, or for any other use requiring water of a lower quality, such as recreational fishing. These criteria are not to be interpreted as encouraging water contact sports in proximity to sewage or industrial waste discharges regardless of treatment requirements:

(I) Bacteria: Fecal coliform not to exceed the following geometric means based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours:

(1) Coastal waters 100 per 100 ml

(2) All other recreational waters 200 per 100 ml

(3) Should water quality and sanitary studies show natural fecal coliform levels exceed 200/100 ml (geometric mean) occasionally in high quality recreational waters, then the allowable geometric mean fecal coliform level shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing fresh water streams.

(ii) Dissolved Oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for waters supporting warm water species of fish.

(iii) pH: Within the range of 6.0 - 8.5.

(iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

(c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; secondary contact recreation in and on the water; or for any other use requiring water of a lower quality:

(I) Dissolved Oxygen: A daily average of 6.0 mg/l and no less than 5.0 mg/l at all times for water designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times for waters supporting warm water species of fish.

(ii) pH: Within the range of 6.0 - 8.5.

(iii) Bacteria: For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 ml (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 ml in lakes and reservoirs and 500 per 100 ml in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 ml based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 ml for any sample. The State does not encourage swimming in surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of fecal coliform. For waters designated as approved shellfish harvesting waters by the appropriate State agencies, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in the National Shellfish Sanitation Program Manual of Operation, Revised 1988, Interstate Shellfish Sanitation Conference, U. S. Department of Health and Human Services (PHS/FDA), and the Center for Food Safety and Applied Nutrition. Streams designated as generally supporting shellfish are listed in Paragraph 391-3-6-.03(14).

(iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

(d) Wild River: For all waters designated in 391-3-6-.03(13) as "Wild River," there shall be no alteration of natural water quality from any source.

(e) Scenic River: For all waters designated in 391-3-6-.03(13) as "Scenic River," there shall be no alteration of natural water quality from any source.

(f) Coastal Fishing: This classification will be applicable to specific sites when so designated by the Environmental Protection Division. For waters designated as "Coastal Fishing", site specific criteria for dissolved oxygen will be assigned and detailed by footnote in Section 391-3-6-.03(3), "Specific Water Use Classifications." All other criteria and uses for the fishing use classification will apply for coastal fishing.

(7) Natural Water Quality. It is recognized that certain natural waters of the State may have a quality that will not be within the general or specific requirements contained herein. This is especially the case for the criteria for dissolved oxygen, temperature, pH and fecal coliform. NPDES permits and best management practices will be the primary mechanisms for ensuring that discharges will not create a harmful situation.

(8) Treatment Requirements. Notwithstanding the above criteria, the requirements of the State relating to secondary or equivalent treatment of all waste shall prevail. The adoption of these criteria shall in no way preempt the treatment requirements.

(9) **Streamflows**. Specific criteria or standards set for the various parameters apply to all flows on regulated streams. On unregulated streams, they shall apply to all streamflows equal to or exceeding the 7-day, 10-year minimum flow (7Q10) and/or the 1-day, 10-year minimum flow. All references to 7-day, 10-year minimum flow (7Q10) and 1-day, 10 year minimum flow also apply to all flows on regulated streams. All references to annual average stream flow also apply to long-term average stream flow conditions.

(10) **Mixing Zone.** Effluents released to streams or impounded waters shall be fully and homogeneously dispersed and mixed insofar as practical with the main flow or water body by appropriate methods at the discharge point. Use of a reasonable and limited mixing zone may be permitted on receipt of satisfactory evidence that such a zone is necessary and that it will not create an objectionable or damaging pollution condition. Protection from acute toxicity shall be provided within any EPD designated mixing zone to ensure a zone of safe passage for aquatic organisms. The procedure is as described in paragraph 391-3-6-.06(4)(d)(5)(vi), except that the numerical pass/fail criteria applies to the end-of-pipe without the benefit of dilution provided by the receiving stream.

(11) **Toxic Pollutant Monitoring.** The Division will monitor waters of the State for the presence or impact of Section 307 (a)(l) Federal Clean Water Act toxic pollutants, and other priority pollutants. The monitoring shall consist of the collection and assessment of chemical and/or biological data as appropriate from the water column, from stream bed sediments, and/or from fish tissue. Specific stream segments and chemical constituents for monitoring shall be determined by the Director on the basis of the potential for water quality impacts from toxic pollutants from point or nonpoint waste sources. Singularly or in combination, these constituents may cause an adverse effect on fish propagation at levels lower than the criteria. Instream concentrations will be as described in 391-3-6-.03 (5)(e). Additional toxic substances and priority pollutants will be monitored on a case specific basis using Section 304(a) Federal Clean Water Act guidelines or other scientifically appropriate documents.

(12) **Fecal Coliform Criteria.** The criteria for fecal coliform bacteria provide the regulatory framework to support the USEPA requirement that States protect all waters for the use of primary contact recreation or swimming. This is a worthy national goal, although potentially unrealistic with the current indicator organism, fecal coliform bacteria, in use today. To assure that waters are safe for swimming indicates a need to test waters for pathogenic bacteria. However, analyses for pathogenic bacteria are expensive and results are generally difficult to reproduce quantitatively. Also, to ensure the water is safe for swimming would require a whole suite of tests be done for organisms such as Salmonella, Shigella, Vibrio, etc. as the presence/absence of one organism would not document the presence/absence of another. This type of testing program is not possible due to resource constraints. The environmental community in the United States has based the assessment of the bacteriological quality of water on testing for pathogenic indicator organisms, principally the coliform group. The assessment of streams, rivers, lakes, and estuaries in Georgia and other States is based on fecal coliform organisms.

Coliform bacteria live in the intestinal tract of warm blooded animals including man. These organisms are excreted in extremely high numbers, averaging about 1.5 billion coliform per ounce of human feces. Pathogenic bacteria also originate in the fecal material of diseased persons. Therefore, waters with high levels of fecal coliform bacteria represent potential problem areas for swimming. However, there is no positive scientific evidence correlating elevated fecal coliform counts with transmission of enteric diseases. In addition, these bacteria can originate from any warm blooded animal or from the soil.

Monitoring programs have documented fecal coliform levels in excess of the criteria in many streams and rivers in urban areas, agricultural areas, and even in areas not extensively impacted by man such as national forest areas. This is not a unique situation to Georgia as similar levels of fecal coliform bacteria have been documented in streams across the nation. The problem appears to lie in the lack of an organism which specifically indicates the presence of human waste materials which can be correlated to human illness. Other organisms such as the Enterococci group and E. coli have been suggested by the USEPA as indicator organisms. However, testing using these organisms by States and the USEPA has indicated similar problems with these indicator organisms.

The Environmental Protection Division will conduct a monitoring project from 1993 through 1995 to evaluate the use of E. coli and Enterococci as indicators of bacteriological quality in Georgia. The Environmental Protection Division will also conduct studies to determine if a better human specific indicator can be found to replace current indicator organisms.

(13) **Specific Water Use Classifications.** Beneficial water uses assigned by the State to all surface waters. These classifications are scientifically determined to be the best utilization of the surface water from an environmental and economic standpoint. Streams and stream reaches not specifically listed are classified as Fishing. The specific classifications are as follows:

SAVANNAH RIVER BASIN		CLASSIFICATION
Chattooga River	Georgia-North Carolina State Line to Tugaloo Reservoir	Wild and Scenic
West Fork Chattooga	Confluence of Overflow Creek and Clear Creek to confluence with Chattooga River (7.3 mi.)	Wild and Scenic
Tallulah River	Headwaters of Lake Burton to confluence with Chattooga River	Recreation
Tugaloo River	Confluence of Tallulah and Chattooga Rivers to Yonah Lake Dam	Recreation
Savannah River	Highway 184 to Clark Hill Dam (Mile 238)	Recreation

Savannah River	Clark Hill Dam (Mile 238) to Augusta, 13th Street Bridge	Drinking Water
Savannah River	US Hwy. 301 Bridge (Mile 129) to Seaboard Coastline RR Bridge (Mile 27.4)	Drinking Water
Savannah River	Seaboard Coastline RR Bridge (Mile 27.4) to Fort Pulaski (Mile 0)	Coastal Fishing
Savannah River	Fort Pulaski (Mile 0) to Open Sea and all littoral waters of Tybee Island	Recreation

OGEECHEE RIVER BASIN		CLASSIFICATION
Ogeechee River	U.S. Hwy. 17 Bridge to Open Sea and littoral waters of Skidaway, Ossabaw, Sapelo, and St. Catherines Islands	Recreation
Little Ogeechee River	South end of White Bluff Road near Carmelite Monastery to Open Sea and littoral waters of Skidaway and Ossabaw Islands	Recreation

OCONEE RIVER BASIN		CLASSIFICATION
Middle Oconee River	Georgia Hwy. 82 to Athens Water Intake	Drinking Water
North Oconee River	Jackson County Road 432 to Athens Water Intake	Drinking Water
Oconee River	Georgia Hwy. 16 to Sinclair Dam	Recreation
Oconee River	Sinclair Dam to Georgia Hwy. 22	Drinking Water
Oconee River	Georgia Hwy. 57 to U.S. Hwy. 80	Drinking Water

UPPER OCMULGEE RIVER		CLASSIFICATION
Big Haynes Creek	Georgia Hwy. 20 to Bald Rock Road	Drinking Water
Alcovy River	Georgia Hwy. 81 to City of Covington Water Intake	Drinking Water
Yellow River	Georgia Hwy. 124 to Porterdale Water Intake	Drinking Water
Jackson Lake	From South River at Georgia Hwy. 36; from Yellow River at Georgia Hwy. 36; from Alcovy River at Newton Factory Road Bridge to Lloyd Shoals Dam	Recreation
Big Haynes Creek	Georgia Highway 78 to Confluence with the Yellow River	Drinking Water

LOWER OCMULGEE RIVER BASIN		CLASSIFICATION
Towaliga River	Headwaters to Georgia Hwy. 36	Drinking Water
Towaliga River	Georgia Hwy. 36 to High Falls Dam	Recreation
Ocmulgee River	Georgia Hwy. 18 to Macon Water Intake	Drinking Water
Tobesofkee Creek	Lake Tobesofkee	Recreation

ALTAMAHA RIVER BASIN		CLASSIFICATION

All littoral waters on the ocean side of St. Simons, Sea, and Sapelo Islands		Recreation
SATILLA RIVER BASIN		CLASSIFICATION
All littoral waters on the ocean side of Cumberland and Jekyll Islands		Recreation
ST. MARYS RIVER BASIN		CLASSIFICATION
All littoral waters on the ocean side of Cumberland Island		Recreation
FLINT RIVER BASIN		CLASSIFICATION
Flint River	Woolsey Road (Fayette Clayton Counties) to Georgia Hwy. 16	Drinking Water
Flint River	Georgia Hwy. 27 to Georgia Power Dam at Lake Worth, Albany	Recreation
Flint River	Bainbridge, U.S. Hwy. 84 Bridge to Jim Woodruff Dam, Lake Seminole	Recreation
CHATTAHOOCHEE RIVER BASIN		CLASSIFICATION
Chattahoochee River	Headwaters to Buford Dam	Recreation
Chattahoochee River	Buford Dam to Atlanta (Peachtree Creek)	Drinking Water and Recreation
Chattahoochee River	Atlanta (Peachtree Creek) to Cedar Creek	Fishing[2]
Chattahoochee River	New River to West Point Dam	Recreation
Chattahoochee River	West Point Dam to West Point Mfg Company Water Intake	Drinking Water
Chattahoochee River	Osanippa Creek to Columbus (North Highland Dam)	Recreation and Drinking Water
Chattahoochee River	Cowikee Creek to Great Southern Division of Great Northern Paper Company	Recreation
Chattahoochee River	Georgia Hwy. 91 (Neal's Landing) to Jim Woodruff Dam	Recreation
Big Creek	Georgia Hwy. 400 to City of Roswell Water intake	Drinking Water
Dog River	Headwaters to Dog River Reservoir	Drinking Water
Bear Creek	Headwaters to Douglasville-Douglas County Water and Sewer Authority Water Intake	Drinking Water
TALLAPOOSA RIVER BASIN		CLASSIFICATION
Tallapoosa River	Headwaters to Georgia Hwy. 100	Drinking Water
Little Tallapoosa	Headwaters to SCS Dam No. 36 (Carrollton River Raw Water Intake)	Drinking Water

COOSA RIVER BASIN		CLASSIFICATION
Conasauga River	Georgia Hwy. 2 to Dalton Water Intake	Drinking Water
Ellijay River	Headwaters to Ellijay Water Intake	Drinking Water
Cartecay River	Headwaters to Ellijay Water Intake	Drinking Water
Coosawattee River	Confluence to Mountaintown Creek to Carters Dam	Recreation
Coosawattee River	U. S. Hwy. 411 to confluence of Conasauga River	Drinking Water
Oostanaula River	Confluence to Conasauga and Coosawattee Rivers to Calhoun Water Intake	Drinking Water
Costanaula River	Confluence with Armuchee Creek to Rome Water Intake	Drinking Water
Oostanaula River	Confluence of Little Dry Creek (below Rome Water Intake) to Coosa River	Fishing
Etowah River	Cherokee County Road 782 to Canton Water intake	Drinking Water
Etowah River	Georgia Hwy. 20 to Allatoona Dam	Recreation and Drinking Water
Etowah River	Allatoona Dam to Cartersville Water Intake	Drinking Water
Coosa River	Confluence of Etowah and Coosawattee to Mayo's Lock and Dam	Fishing
Coosa River	At the Alabama State Line	Recreation
Mill Creek	Headwaters to Dalton Water Supply	Drinking Water
Conasauga River	Waters Within the Cohutta Wilderness Area	Wild and Scenic
Jacks Creek	Waters Within the Cohutta Wilderness Area	Wild and Scenic

TENNESSEE RIVER BASIN		CLASSIFICATION
Hiawassee River	Headwaters to Georgia-North Carolina State Line (including Lake (including Lake Chatuge)	Recreation
Nottely River	Headwaters to Georgia-North Carolina State Line	Recreation
Toccoa River	Headwaters to Georgia-Tennessee State Line (including Lake Blue Ridge)	Recreation

(1) Site specific criteria for this classification are minimum instantaneous and will apply throughout the water column. The dissolved oxygen criteria is no less than 3.0 mg/l in June, July, August, September, and October; no less than 3.5 mg/l in May and November; and no less than 4.0 mg/l in December, January, February, March, and April.

(2) Specific criteria apply at all times when the river flow measured at a point immediately upstream from Peachtree Creek equals or exceeds 750 cfs (Atlanta gage flow minus Atlanta water supply withdrawal):

(14) Trout Streams. Streams designated as Primary Trout Waters are waters supporting a self-sustaining population of Rainbow, Brown or Brook Trout. Streams designated as Secondary Trout Streams are those with no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. Trout streams are classified in accordance with the designations and criteria as follows:

(a) **Criteria.**

(i) There shall be no elevation of natural stream temperatures for Primary Trout Waters; 2°F or less elevation for Secondary Trout Waters.

(ii) No person shall construct an impoundment on Primary Trout Waters, except on streams with drainage basins less than 50 acres upstream of the impoundment. Impoundments on streams with drainage basins less than 50 acres must be approved by the Division.

(iii) No person shall construct an impoundment on Secondary Trout Waters without the approval of the Division.

(b) Designations by County.

BARTOW COUNTY

Primary:

None.

Secondary:

1. Boston Creek watershed upstream from Georgia Hwy. 20.
2. Connesena Creek watershed.
3. Dykes Creek watershed.
4. Pine Log Creek watershed.
5. Pyle Creek watershed.
6. Salacoa Creek watershed.
7. Spring Creek watershed.
8. Stamp Creek watershed upstream from Bartow County Road 269.
9. Toms Creek watershed upstream from Bartow County Road 82.
10. Two Run Creek watershed.
11. Ward Creek watershed.

CARROLL COUNTY

Primary:

None.

Secondary:

1. Brooks Creek watershed.
2. Mud Creek watershed.
3. Tallapoosa River.

CATOOSA COUNTY

Primary:

None.

Secondary:

1. Hurricane Creek watershed upstream from Peters Branch.
2. Little Chickamauga Creek watershed upstream from Catoosa County Road 387.
3. Tiger Creek watershed upstream from Georgia Hwy. 2.
4. Dry Creek watershed upstream from Catoosa County Road 257 (East Chickamauga Creek Watershed).

CHATTOOGA COUNTY

Primary:

None.

Secondary:

1. Allgood Branch watershed upstream from Southern Railroad.

2. Chappel Creek watershed.
3. Chelsea Creek watershed.
4. East Fork Little River watershed.
5. Hinton Creek watershed.
6. Kings Creek watershed.
7. Little Armuchee Creek watershed upstream from Chattooga County Road 326.
8. Middle Fork Little River watershed.
9. Mt. Hope Creek watershed.
10. Perennial Spring watershed.
11. Raccoon Creek watershed upstream from Georgia Hwy. 48.
12. Ruff Creek watershed.
13. Storey Mill Creek watershed.
14. Taliaferro Creek watershed.

CHEROKEE COUNTY

Primary:

None.

Secondary:

1. Boston Creek watershed.
2. Pine Log Creek watershed.
3. Salacoa Creek watershed.
4. Stamp Creek watershed.
5. Bluff Creek watershed upstream from Cherokee County Road 114.
6. Murphy Creek watershed.
7. Soap Creek watershed upstream from Cherokee County Road 116.
8. Wiley Creek watershed.

COBB COUNTY

Primary:

None.

Secondary:

1. Chattahoochee River upstream from I-285 West Bridge.

DADE COUNTY

Primary:

None.

Secondary:

1. Allison Creek watershed.
2. East Fork Little River watershed.
3. Lookout Creek watershed upstream from Dade County Road 197.

4. Rock Creek watershed.
5. West Fork Little River watershed.

DAWSON COUNTY

Primary:

1. Amicalola Creek watershed upstream from Dawson County Road 192 (Devil's Elbow Road).
2. Sweetwater Creek watershed.
3. Anderson Creek watershed.
4. Long Swamp Creek watershed.
5. Nimblewill Creek watershed.

Secondary:

1. Amicalola Creek watershed from Georgia Hwy. 53 upstream to Dawson County Road 192 (Devil's Elbow Road).
2. Shoal Creek watershed upstream from the mouth of Burt Creek.

ELBERT COUNTY

Primary:

None.

Secondary:

1. Savannah River for the ten-mile reach downstream from Hartwell Dam.

FANNIN COUNTY

Primary:

1. Conasauga River - Jacks River watershed.
2. Ellijay River watershed.
3. Etowah River watershed.
4. Fightingtown Creek watershed.
5. Owenby Creek watershed.
6. Persimmon Creek watershed.
7. South Fork Rapier Mill Creek watershed.
8. Toccoa River watershed upstream to Blue Ridge Reservoir dam.
9. Toccoa River watershed upstream from the backwater of Blue Ridge Reservoir.
10. Tumbling Creek watershed.
11. Wilscot Creek watershed.

Secondary:

All streams or stream sections not classified as primary in the above list.

FLOYD COUNTY

Primary:

None.

Secondary:

1. Dykes Creek watershed.

2. Johns Creek watershed upstream from Floyd County Road 212.
3. Kings Creek watershed.
4. Lavender Creek watershed upstream from Floyd County Road 234.
5. Little Cedar Creek watershed.
6. Mt. Hope Creek watershed.
7. Spring Creek watershed (flows into Etowah River).
8. Spring Creek watershed (flows into State of Alabama).
9. Toms Creek watershed.
10. Silver Creek watershed upstream from Georgia Highway 1E.

FORSYTH COUNTY

Primary:

None.

Secondary:

1. Chattahoochee River.

FULTON COUNTY

Primary:

None.

Secondary:

1. Chattahoochee River upstream from I-285 West Bridge.

GILMER COUNTY

Primary:

1. Cartecay River watershed upstream from the mouth of Clear Creek.
2. Clear Creek watershed upstream from Gilmer County Road 92.
3. Conasauga River - Jacks River watershed.
4. Ellijay River watershed upstream from the mouth of Kells Creek.
5. Harris Creek watershed.
6. Johnson Creek watershed.
7. Mountaintown Creek watershed upstream from U.S. Highway 76.
8. Tails Creek watershed upstream from Georgia Hwy. 282.
9. Toccca River - Fightingtown Creek watershed.

Secondary:

1. All streams or sections thereof except the Coosawattee River downstream from Ga. Hwy. 5 Bridge, and Talking Rock Creek (not including tributaries) and those classified as primary.
2. Ball Creek watershed.
3. Sevenmile Creek watershed.
4. Town Creek watershed.
5. Wildcat Creek watershed.

GORDON COUNTY

Primary:

None:

Secondary:

1. Johns Creek watershed.
2. Long Branch watershed.
3. Pine Log Creek watershed upstream from Georgia Hwy. 53.
4. Pin Hook Creek watershed upstream from Ryo Road.
5. Rocky Creek watershed upstream from West Union Road.
6. Salacoa Creek watershed upstream from U.S. Hwy. 411.
7. Snake Creek watershed.

GWINNETT COUNTY

Primary:

None.

Secondary:

1. Chattahoochee River.

HABERSHAM COUNTY

Primary:

1. Chattahoochee River watershed upstream from Georgia Hwy. 255 Bridge.
2. Middle Fork Broad River watershed upstream from USFS Route 92-B.
3. Panther Creek watershed.
4. Soque River watershed upstream from King's Bridge (bridge on Georgia Hwy. 197 just below the mouth of Shoal Creek).

Secondary:

1. Chattahoochee River watershed upstream from Georgia Hwy. 115 to the Georgia Hwy. 255 Bridge.
2. Davidson Creek watershed.
3. Middle Fork Broad River tributaries entering below USFS Route 92-B.
4. Nancytown Creek watershed upstream from Nancytown Lake.
5. North Fork Broad River watershed.
6. Soque River watershed upstream from the mouth of Deep Creek to King's Bridge.
7. Toccoa Creek watershed.

HARALSON COUNTY

Primary:

None.

Secondary:

1. Beach Creek watershed upstream from Haralson County Road 34.
2. Flatwood Creek watershed.
3. Lassetter Creek watershed.

4. Mann Creek watershed upstream from Haralson County Road 162.
5. Tallapoosa River watershed upstream from Haralson County Road 222.
6. Mountain Creek watershed.
7. Tallapoosa Creek watershed.

HART COUNTY

Primary:

None.

Secondary:

1. Savannah River.

LUMPKIN COUNTY

Primary:

1. Amicalola Creek watershed.
2. Camp Creek watershed.
3. Cane Creek watershed upstream from Cane Creek Falls.
4. Cavender Creek watershed.
5. Chestatee River watershed upstream from Lumpkin County Road 52-S976.
6. Clay Creek watershed.
7. Etowah River watershed upstream from the Georgia Hwy. 52 Bridge.
8. Hurricane Creek watershed upstream from Lumpkin County Road 118.
9. Mooney Branch watershed.
10. Tobacco Pouch Branch watershed.

Secondary:

1. Cane Creek watershed upstream from Georgia Hwy. 52 Bridge to Cane Creek Falls.
2. Chestatee River watershed upstream from the mouth of Tesnatee Creek to Lumpkin County Road 52-S976.
3. Etowah River watershed upstream from Castleberry Bridge to Georgia Hwy. 52 except those classified as primary above.
4. Shoal Creek watershed.
5. Yahoola Creek watershed upstream from Georgia Hwy. 52.

MURRAY COUNTY

Primary:

1. Conasauga - Jacks River watershed upstream from Georgia-Tennessee state line.
2. Holly Creek watershed upstream from Murray County Rd. SR826 (U.S. Forest Service line).
3. Rock Creek watershed upstream from Murray County Rd. 4 (Dennis).

Secondary:

1. All tributaries to Carters Reservoir.
2. Holly Creek watershed (including Emory Creek watershed) upstream from Emory Creek to Murray County Road SR826 (U.S. Forest Service line).
3. Mill Creek watershed upstream from Murray County Road 27.
4. North Prong Sumac Creek watershed.

5. Sugar Creek watershed upstream from Murray County Road 4.
6. Sumac Creek watershed upstream from Coffey Lake.
7. Mill Creek watershed.
8. Rock Creek watershed upstream of Murray County Road 301.

PAULDING COUNTY

Primary:

None.

Secondary:

1. Possum Creek watershed upstream from Paulding County Road 54.
2. Powder Creek watershed.
3. Pumpkinvine Creek watershed upstream from Paulding County Road 231.
4. Pyle Creek watershed.
5. Raccoon Creek watershed upstream from Road SR2299.
6. Tallapoosa River watershed.
7. Ward Creek watershed.
8. Simpson Creek watershed.
9. Thompson Creek watershed.

PICKENS COUNTY

Primary:

1. Cartecay River watershed.
2. Talking Rock Creek watershed upstream from Route S1011.

Secondary:

1. Amicalola Creek watershed.
2. East Branch watershed (including Darnell Creek watershed).
3. Fisher Creek watershed (upstream from the confluence of Talona Creek and Fisher Creek).
4. Fourmile Creek watershed.
5. Hobson Creek watershed.
6. Little Scarecorn Creek watershed.
7. Long Branch watershed.
8. Long Swamp Creek watershed upstream from Pickens County Road 294.
9. Mud Creek watershed.
10. Pin Hook Creek watershed.
11. Polecat Creek watershed.
12. Rock Creek watershed.
13. Salacoa Creek watershed.
14. Scarecorn Creek watershed upstream from Georgia Hwy. 53.
15. Ball Creek watershed.

16. Bluff Creek watershed.
17. Sevenmile Creek watershed.
18. Soap Creek watershed.
19. Town Creek watershed.
20. Wildcat Creek watershed.

POLK COUNTY

Primary:

None.

Secondary:

1. Cedar Creek watershed upstream from Polk County Road 121.
2. Lassetter Creek watershed.
3. Little Cedar Creek watershed.
4. Pumpkinpile Creek watershed upstream from Road SR1032.
5. Spring Creek watershed.
6. Swinney Branch watershed.
7. Thomasson Creek watershed.
8. Fish Creek watershed upstream of Plantation Pipeline.
9. Silver Creek watershed.
10. Simpson Creek watershed upstream of Lake Dorene.
11. Thompson Creek watershed upstream of Polk County Road 441.

RABUN COUNTY

Primary:

1. Chattooga River - all tributaries classified as primary.
2. Little Tennessee River - entire stream and tributaries classified as primary except all streams or sections thereof classified as secondary.
3. Tallulah River - entire stream and tributaries classified as primary except the Tallulah River downstream from Lake Rabun Dam to headwaters of Tugaloo Lake.

Secondary:

1. Little Tennessee River downstream from U.S. Hwy. 441 Bridge.
2. Mud Creek downstream from Sky Valley Ski Resort Lake to the Little Tennessee River.

STEPHENS COUNTY

Primary:

1. Middle Fork Broad River watershed upstream from USFS Route 92-B.
2. Panther Creek watershed upstream from the mouth of Davidson Creek.

Secondary:

1. Davidson Creek watershed.
2. Leatherwood Creek watershed upstream from Georgia Hwy. 184 Bridge.
3. Little Toccoa Creek watershed.

4. Middle Fork Broad River watershed upstream from SCS flood control structure #44 to USFS Route 92-B.
5. North Fork Broad River watershed upstream from SCS flood control structure #1.
6. Panther Creek watershed downstream from the mouth of Davidson Creek.
7. Toccoa Creek upstream from Toccoa Falls.

TOWNS COUNTY

Primary:

1. Brasstown Creek watershed.
2. Chattahoochee River watershed.
3. Gumlog Creek watershed.
4. Hiawassee River watershed - entire stream and all tributaries classified as primary except all streams or sections thereof classified as secondary.
5. Tallulah River watershed.
6. Winchester Creek watershed.

Secondary:

1. Hightower Creek downstream from the mouth of Little Hightower Creek.

UNION COUNTY

Primary:

1. Arkaqua Creek watershed.
2. Brasstown Creek watershed.
3. Chattahoochee River watershed.
4. Conley Creek watershed upstream from Road S2325.
5. Coosa Creek watershed upstream from mouth of Anderson Creek.
6. Dooley Creek watershed.
7. East Fork Wolf Creek watershed upstream from Lake Trahlyta.
8. Gumlog Creek watershed.
9. Ivylog Creek watershed upstream from USDA Forest Service property line.
10. Nottely River watershed upstream from the mouth of Town Creek.
11. Toccoa River watershed.
12. Town Creek watershed.
13. West Fork Wolf Creek watershed.
14. Youngcane Creek watershed upstream from the mouth of Jones Creek.

Secondary:

1. All streams or sections thereof except the Butternut Creek watershed and the Nottely River downstream of Nottely Dam and those classified as primary.

WALKER COUNTY

Primary:

1. Furnace Creek watershed.
2. Harrisburg Creek watershed (including Dougherty Creek and Allen Creek) upstream from Dougherty Creek.

Secondary:

1. Chappel Creek watershed.
2. Concord Creek watershed.
3. Dry Creek watershed (tributary to East Armuchee Creek).
4. Duck Creek watershed.
5. East Armuchee Creek watershed upstream from Georgia Hwy. 136.
6. East Fork Little River watershed (flows into Dade County).
7. East Fork Little River watershed (flows into Chattooga County; includes Gilreath Creek).
8. Gulf Creek watershed.
9. Johns Creek watershed.
10. Left Fork Coulter Branch watershed.
11. Little Chickamauga Creek watershed.
12. Middle Fork Little River watershed (includes Cannon Branch and Hale Branch).
13. Rock Creek watershed (including Sawmill Branch) upstream from Sawmill Branch.
14. Ruff Creek watershed.
15. Snake Creek watershed.
16. West Armuchee Creek watershed.
17. West Chickamauga Creek watershed upstream from Walker County Road 107.
18. West Fork Little River watershed.
19. Chattanooga Creek watershed upstream of Walker County Road 235.

WHITE COUNTY

Primary:

1. Cathey Creek watershed upstream from the Arrowhead Campground Lake.
2. Chattahoochee River watershed upstream from Georgia Hwy. 255 Bridge.
3. Town Creek watershed upstream from the mouth of Jenny Creek.

Secondary:

1. Chattahoochee River watershed upstream from Georgia Hwy. 115 to the Georgia Hwy. 255 Bridge.
2. Little Tesnatee Creek watershed upstream from the mouth of Turner Creek.
3. Turner Creek watershed except as listed under primary above (Turner Creek nearest to Cleveland city limits).

WHITFIELD COUNTY

Primary:

None.

Secondary:

1. Coahulla Creek watershed upstream from Whitfield County Road 183.
2. East Armuchee Creek watershed.
3. Snake Creek watershed.
4. Spring Creek watershed.

5. Swamp Creek watershed upstream from Whitfield County Road 9.
6. Tiger Creek watershed.
7. Dry Creek watershed.

(15) **Waters Generally Supporting Shellfish.** Waters designated by the Coastal Resources Division as productive shellfish waters (currently producing or with the potential to produce shellfish) are opened and closed according to State Law and the requirements of the National Shellfish Sanitation Program Manual of Operations. For a current listing of open productive shellfish waters, contact the Coastal Resources Division. Specific water reaches generally supporting shellfish are as follows:

CHATHAM COUNTY

1. Savannah River South Channel at Fort Pulaski to confluence with Lazaretto Creek.
2. Tybee River at confluence with Bates Creek and eastward, including Bates Creek.
3. Wilmington River at confluence with Herb River and eastward.
4. Herb River at confluence with Wilmington River to County Road 890.
5. All waters surrounding Skidaway Island including Moon River North to Skidaway Island Road.
6. Vernon River at Vernonburg and eastward.
7. Little Ogeechee River from Rose Dhu Island and eastward excluding Harvey Creek on Harvey's Island.
8. Ogeechee River below Shad Island and eastward (north of center line).
9. All waters surrounding Ossabaw Island and Wassaw Island to the center line of the intracoastal waterway.

BRYAN COUNTY

1. Ogeechee River below Shad Island and eastward (south of center line).
2. Redbird Creek at Cottonham and eastward.
3. All waters west of main channel center line of intracoastal waterway to confluence of Medway River.
4. Medway River at south confluence of Sunbury Channel and East Channel and eastward (north of center line).

LIBERTY COUNTY

1. Medway River at south confluence of Sunbury Channel and East Channel and eastward (south of center line).
2. Dickinson Creek at Latitude 31° 44.2' to confluence with Medway River.
3. Johns Creek at end of County Road 3 and eastward to confluence with Medway River.
4. All other waters east and north of Colonels Island.
5. North Newport River System at confluence with Carrs Neck Creek and eastward, including Cross Tide Creek.
6. South Newport River System north of center line and eastward from confluence with South Hampton Creek.

MCINTOSH COUNTY

1. South Newport River System south of centerline and eastward from confluence with South Hampton Creek.
2. Julienton River at Latitude 31° 36.8' and eastward to confluence with Sapelo River, including Broad River near Shellman Bluff.
3. Sapelo River from end of County Road 127 eastward excluding White Chimney River and Savannah Cut.
4. All waters surrounding Creighton Island.
5. Atwood Creek at Latitude 31° 28.3' and eastward.
6. Hudson Creek at Latitude 31° 27.2' and eastward.
7. Carnigan River at Latitude 31° 26.2' and eastward.

8. All waters surrounding Sapelo Island to the center line of Sapelo Sound, including New Teakettle Creek, Old Teakettle Creek and Dark Creek.
9. Dead River at Longitude 81° 21.5' to confluence with Folly River.
10. Folly River at Longitude 81° 21.2' to confluence with intracoastal waterways including Fox Creek tributary.
11. North River from confluence with Old Darien River to confluence with intracoastal waterway, including Old Darien River.
12. Darien River from confluence with Three Mile Cut to intracoastal waterway.
13. Rockdedundy River from confluence with Darien River to intracoastal waterway.
14. All waters surrounding Doboy Island, Commodore Island, Wolf Island, and Rockdedundy Island.
15. South River at confluence of intracoastal waterway to Doboy Sound.
16. Altamaha River from confluence with Three Mile Cut and Mackay River and eastward, including Buttermilk Sound, but excluding South Altamaha River.
17. Dog Hammock to confluence with Sapelo River.
18. Eagle Creek to confluence with Mud River.

GLYNN COUNTY

1. Mackay River water system from confluence with South Altamaha River to confluence with Brunswick River, excluding Wally's Leg.
2. All waters surrounding St. Simons Island and Little St. Simons Island.
3. All waters surrounding Andrews Island excluding Academy Creek.
4. Turtle River from confluence with Buffalo River to confluence with South Brunswick River, excluding Cowpen Creek, Yellow Bluff Creek, and Gibson Creek.
5. South Brunswick River and drainage system to confluence of Brunswick River.
6. Fancy Bluff Creek from confluence with South Brunswick River to the Little Satilla River.
7. Brunswick River from confluence of Turtle River and South Brunswick River to St. Simons Sound.
8. Little Satilla River from confluence with Fancy Bluff Creek to St. Andrews Sound (north of center line).
9. All waters surrounding Jekyll Island, Jointer Island, and Colonels Island.

CAMDEN COUNTY

1. Little Satilla River from confluence with Fancy Bluff Creek to St. Andrews Sound (south of center line), excluding Maiden Creek.
2. Umbrella Creek from confluence with Dover Creek below Dover Bluff.
3. Dover Creek from confluence with Umbrella Creek to confluence with Satilla River.
4. Satilla River near Floyd Basin and unnamed cut over to Dover Creek to St. Andrews Sound.
5. Floyd Basin at confluence with Todd Creek to confluence with Satilla River.
6. Floyd Basin at confluence with Todd Creek to confluence with Cumberland River.
7. Black Point Creek south of Latitude 30° 52.0' south to Crooked River.
8. Crooked River from Crooked River State Park to Cumberland River.
9. Cumberland River from confluence of St. Andrews Sound to confluence with St. Marys River (north of center line).
10. North River from County Road 75 to confluence with St. Marys River.
11. All waters surrounding Cumberland Island.
12. St. Marys River (north of center line) from end of State Road 40 to Cumberland Sound.

(16) Specific Criteria for Lakes and Major Lake Tributaries. In addition to the general criteria, the following lake specific criteria are deemed necessary and shall be required for the specific water usage as shown:

(a) West Point Lake: Those waters impounded by West Point Dam and downstream of U.S. 27 at Franklin.

(I) Chlorophyll a: For the months of April through October, the average of monthly photic zone composite samples shall not exceed 27 µg/l at the LaGrange Water Intake.

(ii) pH: Within the range of 6.0 - 9.5.

(iii) Total Nitrogen: Not to exceed 4.0 mg/l as Nitrogen in the photic zone.

(iv) Phosphorus: Total lake loading shall not exceed 2.4 pounds per acre foot of lake volume per year.

(v) Fecal Coliform Bacteria:

1. U.S. 27 at Franklin to New River: Fecal coliform bacteria shall not exceed the Fishing criterion as presented in 391-3-6 .03(6)(c).

2. New River to West Point Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b).

(vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(f).

(vii) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature.

(viii) Major Lake Tributaries: For the following tributaries, the annual total phosphorus loading to West Point Lake shall not exceed the following:

1. Yellow Jacket Creek at Hammet Road: 11,000 pounds.

2. New River at Hwy 100: 14,000 pounds.

3. Chattahoochee River at U.S. 27: 1,400,000 pounds.

(b) Lake Walter F. George: Those waters impounded by Walter F. George Dam and upstream to Georgia Highway 39 near Omaha.

(I) Chlorophyll a: For the months of April through October, the average of monthly photic zone composite samples shall not exceed 18 ug/l at mid-river at U.S. Highway 82 or 15 ug/l at mid-river in the dam forebay.

(ii) pH: Within the range of 6.0-9.5 standard units.

(iii) Total Nitrogen: Not to exceed 3.0 mg/l as nitrogen in the photic zone.

(iv) Phosphorous: Total lake loading shall not exceed 2.4 pounds per acre-foot of lake volume per year.

(v) Fecal Coliform:

1. Georgia Highway 39 to Cowikee Creek: Fecal coliform bacteria shall not exceed the Fishing criterion as presented in 391-3-6-.03(6)(c)(iii).

2. Cowikee Creek to Walter F. George Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(I).

(vi) Dissolved Oxygen: A daily average of no less than 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(f).

(vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).

(viii) Major Lake Tributary: The annual total phosphorous loading to Lake Walter F. George, monitored at the Chattahoochee River at Georgia Highway 39, shall not exceed 2,000,000 pounds.

(c) Lake Jackson: Those waters impounded by Lloyd Shoals Dam and upstream to Georgia Highway 36 on the South and Yellow Rivers, upstream to Newton Factory Bridge Road on the Alcovy River and upstream to Georgia Highway 36 on Tussahaw Creek.

(I) Chlorophyll a: For the months of April through October, the average of monthly mid-channel photic zone composite samples shall not exceed 20 ug/l at a location approximately 2 miles downstream of the confluence of the South and Yellow Rivers at the junction of Butts, Newton and Jasper Counties.

(ii) pH: Within the range of 6.0-9.5 standard units.

(iii) Total Nitrogen: Not to exceed 4.0 mg/l as nitrogen in the photic zone.

(iv) Phosphorous: Total lake loading shall not exceed 5.5 pounds per acre-foot of lake volume per year.

(v) Fecal Coliform: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(I).

(vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(f).

(vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).

(viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Jackson shall not exceed the following:

1.	South River at Island Shoals:	179,000 pounds
2.	Yellow River at Georgia Highway 212:	116,000 pounds
3.	Alcovy River at Newton Factory Bridge Road:	55,000 pounds
4.	Tussahaw Creek at Fincherville Road.:	7,000 pounds

(d) Lake Allatoona: Those waters impounded by Allatoona Dam and upstream to State Highway 5 on the Etowah River, State Highway 5 on Little River, the Lake Acworth Dam, and the confluence of Little Allatoona Creek and Allatoona Creek. Other impounded tributaries to an elevation of 840 feet mean sea level corresponding to the normal pool elevation of Lake Allatoona.

(i) Chlorophyll a: For the months of April through October, the average monthly mid-channel photic zone composite samples shall not exceed the chlorophyl a concentrations at the locations listed below:

(1)	Upstream from the Dam	10 μg/l
(2)	Allatoona Creek upstream from I-75	10 μg/l
(3)	Mid-Lake downstream from Kellogg Creek	10 μg/l
(4)	Little River upstream from Highway 205	15 μg/l
(5)	Etowah River upstream from Sweetwater Creek	12 μg/l

(ii) pH: Within the range of 6.0-9.5 standard units

(iii) Total Nitrogen: Not to exceed 4 mg/l as nitrogen in the photic zone.

(iv) Phosphorous: Total lake loading shall not exceed 1.3 pounds per acre-foot of lake volume per year.

(v) Fecal Coliform:

1. Etowah River, State Highway 5 to State Highway 20: Fecal coliform bacteria shall not exceed the Fishing Criterion as presented in 391-3-6.-03(6)(c)(iii).

2. Etowah River, State Highway 20 to Allatoona Dam: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6.-03(6)(b)(i).

(vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(g).

(vii) Temperature:

1. Etowah River, State Highway 5 to State Highway 20: Water temperature shall not exceed the Fishing criterion as presented in 391-3-6-.03(6)(c)(iv).

2. Etowah River State Highway 20 to Allatoona Dam: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).

(viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Allatoona shall not exceed the following:

1.	Etowah River at State Highway 5 spur and 140, at the USGS gage	340,000 lbs/yr
2.	Little River at State Highway 5 (Highway 754)	42,000 lbs/yr
3.	Noonday Creek at North Rope Mill Road	38,000 lbs/yr
4.	Shoal Creek at State Highway 108 (Fincher Road)	9,200 lbs/yr

(e) Lake Sidney Lanier: Those waters impounded by Buford Dam and upstream to Belton Bridge Road on the Chattahoochee River, 0.6 miles downstream from State Road 400 on the Chestatee River, as well as other impounded tributaries to an elevation of 1070 feet mean sea level corresponding to the normal pool elevation of Lake Sidney Lanier.

(vi) Chlorophyll a: For the months of April through October, the average of monthly mid-channel photic zone composite samples shall not exceed the chlorophyll a concentrations at the locations listed below:

1.	Upstream from the Buford Dam forebay	5 μg/l
2.	Upstream from the Flowery Branch confluence	5 μg/l
3.	At Browns Bridge Road (State Road 369)	5 μg/l
4.	At Bolling Bridge (State Road 53) on Chestatee River	10 μg/l
5.	At Lanier Bridge (State Road 53) on Chattahoochee River	10 μg/l

(ii) pH: Within the range of 6.0-9.5 standard units.

(iii) Total Nitrogen: Not to exceed 4 mg/l as nitrogen in the photic zone.

(iv) Phosphorous: Total lake loading shall not exceed 0.25 pounds per acre-foot of lake volume per year.

(v) Fecal Coliform: Fecal coliform bacteria shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(I).

(vi) Dissolved Oxygen: A daily average of 5.0 mg/l and no less than 4.0 mg/l at all times at the depth specified in 391-3-6-.03(5)(g).

(vii) Temperature: Water temperature shall not exceed the Recreation criterion as presented in 391-3-6-.03(6)(b)(iv).

(viii) Major Lake Tributaries: For the following major tributaries, the annual total phosphorous loading to Lake Sidney Lanier shall not exceed the following:

1.	Chattahoochee River at Belton Bridge Road	178,000 pounds
2.	Chestatee River at Georgia Highway 400	118,000 pounds
3.	Flat Creek at McEver Road	14,400 pounds

(17) Effective Date. This rule shall become effective twenty days after filing with the Secretary of State's office.

Authority Ga. Laws 1964, p. 416, as amended; Reorganization Act of 1972, Ga. Laws 1972, Section 32, 1517, and 1534. **Administrative History.** Original Rule entitled "Water Use Classifications and Water Quality Standards" was filed on June 10, 1974; effective June 30, 1974. **Amended:** Filed May 29, 1985; effective June 19, 1985. **Amended:** Filed December 9, 1988; effective December 29, 1988. **Amended:** Filed May 31, 1989; effective June 20, 1989. **Amended:** ER 391-3-6-0.16-.03 was f. Jul. 6, 1989; eff. June 30, 1989, the date of adoption to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER, as specified by the Agency. **Amended:** ER. 391-3-5-0.17-.03 was f. Aug. 25, 1989, the date of adoption, to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER., as specified by the Agency. **Amended:** ER. 391-3-6-0.19-.03 was f. Dec. 8, 1989, the date of adoption, to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER., as specified by the Agency. **Amended:** F. Dec. 8, 1989. **Amended:** F., Apr. 3, 1990; eff. Apr. 23, 1990. **Amended:** F. Apr. 8, 1993; eff. Apr. 28, 1993. Amended: F. Aug. 9, 1993; eff. Aug 29, 1993.; Amended: F. Aug. 30, 1995; Eff. Sept. 19, 1995. **Amended:** E.R. 391-3-6 was filed May. 1,1996, eff. April 25, 1996, the date of adoption to remain in effect for a period of 120 days or until the effective date of a permanent Rule covering the same subject matter superseding this ER, as specified by the Agency. Amended: F. July 10, 1996. Eff. July 30, 1996. **Amended: F.** Oct. 17, 1996; Eff. Nov. 6, 1996. **Amended: F.** May 2, 1997; Eff. May 22, 1997. **Amended: F** Nov. 3, 1998; **Eff:** Nov. 23, 1998; Amended: F Feb. 7, 2000; Eff. Feb 27, 2000; Amended: F Apr. 12, 2000, Eff. May 2, 2000.

391-3-6-.04 Marine Sanitation Devices. Amended.

(1) Purpose. The purpose of Paragraph 391-3-6-.04 is to prescribe procedures pertaining to construction, installation and operation of marine sanitation devices, facilities or methods of sewage disposal.

(2) Definitions. All terms used in the Paragraph shall be interpreted in accordance with the definitions as set forth in the Act unless otherwise herein defined in this Paragraph or in any other Paragraph of these Rules.

(a) "Boat" means any vessel or watercraft whether moved by oars, paddles, sails, or other power mechanism, inboard or outboard, or any other vessel or structure floating upon the waters of this State whether or not capable of self locomotion, including, but not limited to, cabin cruisers, houseboats, barges and similar floating objects.

(b) "Marine Toilet" means any toilet on or within any boat

(c) "Other Disposal Unit" means any device on or within any boat, other than marine toilet, which is intended for use in the disposal of human body wastes or sewage.

(d) "Blender" means any mechanical device capable of reducing sewage solids into a finely divided state such that a liquid disinfecting agent may be effectively dispersed throughout the blended sewage.

(e) "Marine Sanitation Devices" mean any equipment for installation on a boat which is designed to receive, retain, treat, or discharge sewage or any process to treat such sewage.

(f) "Sewage," for the purposes of this Paragraph only, means water carried wastes, which are generated by human beings or their activities.

(3) General Provisions.

(a) Any marine toilet or other disposal unit located on or within any boat operated on waters of this State shall have securely affixed to the interior discharge toilet or unit a suitable marine sanitation device designed, constructed, and operated in accordance with requirements prescribed herein. All sewage passing into or through the marine toilet or other disposal unit shall discharge solely to the marine sanitation device.

(b) This Paragraph shall not apply to ocean going vessels of 20 tons displacement or more.

(4) Waste Treatment Devices and Equipment.

(a) All discharges from marine sanitation devices into or upon the waters of this State shall be in compliance with the Federal standards of performance and regulations for marine sanitation devices promulgated pursuant to Section 312 of the Federal Act.

(b) For vessels on the lakes listed in the Official Code of Georgia Annotated Section 12-5-29(c) as amended, it shall be unlawful for any person to operate or float a vessel having a marine toilet unless such marine toilet only discharges into a holding tank located on the vessel. It is further required that:

(I) Such holding tank be constructed so as to prevent removal of the sewage held therein except by pumping:

(2) The holding tank be properly vented to the outside air in such fashion as not to foul the interior of the boat structure;

(3) Only those chemicals approved by the Division can be added to the holding tank; and